

Work Order ID 54885

January 5, 2010 8:05:17 AM



Page 1

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust. Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan:

Date: 10-1-05

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3905

B

IIN-D119-646

B

100

0.00



DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP D119-646-243
CHG 001

N/A

110

0.00



Skid tubes

Skid tubes

Memo

0.00

1- Inspect Mat'l D2500-1-190 for damage
2- Ensure squareness of ends

DP

10-1-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Page 2

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

150

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Install drill jig DT9480 drill all x-bolt spacer holes using 3/16 drill

2- Scribe batch # inside aft end of tube

DP 10-1-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 3

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Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160 170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

$h = 5.25^n$

275 10/01/07

0.00

Memo

170 160



CNC Bend 1

CNC Delta 100 Bender

Memo

0.00

1- Bend AFT end of tube using CNC Bender 1 and bend prog. D3905 AFT as per dwg D3905. Must use bending Aid DT9538, located 23.25" from Aft end.

2- Esure bending Aid DT9538 is positioned correctly, that the bender set up in on full wide and that the indexing ridge is covered with graphite grease.

10-1-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 4

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Start Date: 05/01/2010 Start Qty: 1.00



1st Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

0.00



Skidtubes

Skidtubes

Memo

0.00

1- Verify dimension of bend as per dwg D3905

2- Buff out marks left from bending.

3- Drill Aft Float bag holes using DT9493 as per dwg D3905 detail G and section F-F, open to finished size

4- Drill Aft ~~wear plate~~ and wearpad holes using ~~DT 9493~~ and DT 9545 as per dwg D3905 detail ~~G~~ open to finished size

5- Open x-bolt spacer holes to finished size as per dwg (sections D-D and E-E)
DO NOT OPEN FWD SADDLE HOLES

6- Deburr, blow out chips from inside of tube

7- Bond web in place as per Dwg D3905 & QSI 015.

A/R Sikaflex-291

Sikaflex expire date:

Start: 10-1-14 Time: 3:30

Finish: Time:

***** (Adhere for 12 hours) *****

AWM 10-01-09

10/01/14
DP 10-1-12

AWM 10-1-14

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 5

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

BE 10/01/10

200

0.00



CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1- Bend Fwd end of tube using bender 1 and bend prog. D3905 Fwd. Use bending aid DT9544 ensure proper positioning

2- Cut Fwd end of tube as per dwg.

VERIFY MEASUREMENT BEFORE CUTTING

10-1-18

W/O:		WORK ORDER CHANGES					
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January 5, 2010 8:05:17 AM



Page 6

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Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Buff out marks left from bending

2- Drill Fwd cap holes using DT8215. Open Fwd and Aft cap holes to 0.208"

3- Open Fwd saddle holes to finished size as per dwg

4- Drill Fwd x-bolt hole and open to finished size. (Holes must be laid out manually)

5- Drill towing hole and open to finished size. (Holes must be laid out manually)

6- Open Aft float holes 0.391" as per dwg D3905 detail G and section F-F

7- Deburr, blow out chips from inside of tube.

220

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

⇒ S w b i l a



10-1-15

(40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 54885

January 5, 2010 8:05:17 AM

Page 7

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Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/1/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

224

0.00



Skidtubes

Memo

0.00

1- Countersink x-bolt holes as per dwg

2- Remove alodine prepare for welding

3- Insert x-bolt spacers

4- Weld x-bolt spacer as per dwg

A/R Alum rod Batch:

5- Grind welds flush as per dwg

6- Counter bore x-bolt holes as per dwg

7- Deburr

BE 10/01/20

BE 10/01/20

BE 10/01/20

BE 10/01/20

M112860

AWM 10-1-21

225

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

10/01/21

40

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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January 5, 2010 8:05:17 AM

Page 8

Item ID: D119-646-243

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Stop

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/05/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

226

QC10- Inspect visual per QS1004- ground welds

0.00

⇒ S1010121

(X) ✓



QC

Memo

0.00

Quality Control

227

Pressure Wash per QS1005 4.3

0.00

Bl. 10-01-26

(1) ✓



HandFinish

Memo

0.00

Hand Finishing

240

White Gloss(Ref:4.3.5.1) per QS1005 4.3-Alum

0.00

M113170

START: 2:05pm 0.00

⇒ Jll 10-01-26

(X) ✓



Powdercoat

Memo

Powder Coating

TEMP: 220°F

FIN: 2:45pm

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / -Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 54885

January 5, 2010 8:05:18 AM

Page 9

Item ID: D119-646-243

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Setup Start

Revision ID:

Stop

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 12/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

245

QC3- Inspect Part Finish

0.00

PL 10-02-3 D.



QC

Memo

0.00

Quality Control

250

HandFinish

0.00



HandFinishing

Memo

0.00

PL 10-02-3 D.

Hand Finishing

1-Install inserts as per Dwg D3905.

Plc →

260

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Sidels

Quality Control

D.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D119-646-243 PAR #: _____ Fault Category: Skid tubes NCR: Yes No DQA: 2 Date: 10-02-17
 Resolution: re work Disposition: re work QA: N/C Closed: 2 Date: 10/02/18

NCR: <u>54885</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/2/1	# 290	During installation of inserts it was found that 1 hole for inserts on AFT end is too close to the Ridge.	<u>GP</u> 10.02.01 per QSI 642	→ Build out some of the Ridge to fit insert. → Re touch up Alodine	<u>[Signature]</u> 10-2-2 10-2-2	<u>S</u> 10/2/13	<u>GP</u> 10.02.01 per QSI 642	<u>S</u> 10/02/01
		R.C. process.	<u>GP</u> 10.02.01	→ Apply Znron to cover up the Remnant of Plc	<u>H</u> 10-2-2	<u>S</u> 10/2/13	<u>GP</u> 10.02.01	<u>S</u> 10/02/01

NOTE: Date & initial all entries

Work Order ID 54885

January 5, 2010 8:05:18 AM

Page 10

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Setup Start

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Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

270

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install wearpads, gaskets and wearplates as per Dwg D3905. Put sikaflex in insert before installing bolts and washers
A/R ☐ Sikaflex-240/291 *M112345*
Sikaflex expire date: *10/08.*

2- install plugs assembly as per dwg.

3 -Inspect for foreign objects as per QSI 024

4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.
A/R ☐ Sikaflex-240/291 *M112345.*
Sikaflex expire date: *10/08*

10-02-4. ①.

280

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID 54885



Page 11

January 5, 2010 8:05:18 AM

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Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 11/1/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

285

Wing Walk as per dwg QSI005 4.4 Batch 112900

0.00

BR 10-02-4L

①



HandFinish

Memo

0.00

Hand Finishing

286

QC3 - Inspect Part Finish

0.00

QC3 - 8/10/05

①



QC

QC5 + QC3

8 Memo

0.00

QC5 - 8/10/05

①

Quality Control

290

Identify as per dwg & Stock Location:

0.00



Packaging

Memo

PPD 54884

0.00

Packaging

Rec'd 11/1/10

W/O:		WORK ORDER CHANGES					
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Page 12

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Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/02/16

MF 10-2-16

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Page 1

Work Order ID: 54885

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2500-1-190		Manufactured	No			110	Each	96.0000	1.0000			
Ext'n - I' Beam Tube 4"												

Warehouse

Location

Main Warehouse

LG

52319

Main Warehouse

ST

46468

Loc Qty

93

93

3

3

Loc Code

10-1-6

D3885-3

Manufactured No

170

Each

14.0000

1.0000

Standard Web

Warehouse

Location

Main Warehouse

LG

47740

Main Warehouse

ST

51844

52425

Loc Qty

1

1

13

1

12

Loc Code

1

W P/1/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

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Parent Item: D119-646-243



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Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issue	Status
D3903-1 		Manufactured	No			190	Each	64.0000	12.0000			
Spacer												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

LG 54

51849 54

Main Warehouse

ST 10

47476 10

12 BE 10/01/20

D3681-1 Manufactured No

190 Each 70.0000 8.0000



Spacer

Warehouse Loc Qty Loc Code
Location

Main Warehouse

LG 68

51920 20

52898 48

Main Warehouse

ST 2

47123 2

8 BE 10/01/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------	---------------------	------------	----------	------------------	---------------	--------------	-----------------	-------------	-----------------------	------------	-------------	--------

D3683-3		Purchased	No			250	Each	623.0000	12.0000			
---------	--	-----------	----	--	--	-----	------	----------	---------	--	--	--



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

623

47805 ✓

623

ALS4-1032-130

Purchased

No

250

Each

2,717.000 10.0000



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

2717

110511 ✓

2717

D2855-3

Manufactured

No

270

Each

15.0000 2.0000



Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

fp5

15

52281 ✓

15

12. PR 10-02-11.

10 PR 10-02-11

2 PR 10-02-11.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-1		Manufactured	No			270	Each	1,744.000	4.0000			
Phenolic Washer												

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	1244	
39275	19	
42329	5	
47628 ✓	220	
52505	1000	
Main Warehouse		
ST117	500	
51674	500	

4 BX 10-02-4

D3846-1	Manufactured	No				270	Each	51.0000	1.0000			
GASKET												

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	19	
47806	11	
51827 ✓	8	
Main Warehouse		
ST236B	32	
53735	32	

1 BX 10-02-4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3846-11		Manufactured	No			270	Each	29.0000	1.0000			
GASKET												

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	18	
51833 ✓	18	
Main Warehouse		
ST	11	
47807	11	

1 BK 10-02-4.

D3847-1		Manufactured	No			270	Each	37.0000	1.0000			
WEARPAD												

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	37	
47808	4	
51823 ✓	33	

1 BK 10-02-4.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng /, Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates


Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC


Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Item Issued	Status
D3847-11  WEARPAD		Manufactured	No			270	Each	19.0000	1.0000			

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
FP	17	
51824 ✓	17	
Main Warehouse		
ST	2	
47809	2	

1 BL 10-02-4.

D3849-047  WEARPLATE	Manufactured	No				270	Each	2.0000	1.0000			
---	--------------	----	--	--	--	-----	------	--------	--------	--	--	--

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	2	
51837 ✓	2	

1 BL 10-02-4.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3849-045		Manufactured	No			270	Each	3.0000	1.0000			
AFT WEARPLATE ASSY, FLOATGEAR												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

3

47811

1

51836 ✓

2

D3904-1

Manufactured No

270

Each

301.0000

16.0000

Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

1

48374

1

Main Warehouse

ST136

300

51875 ✓

300

10-02-4

16 B's 10-02-4.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-3 		Manufactured	No			270	Each	252.0000	12.0000			
Phenolic Washer												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 8

34471 8

Main Warehouse

ST117 244

51596 ✓ 244

AN3C5A

Purchased

No

270

Each

669.0000

14.0000



Bolt

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST ~~113108~~ 113144 669

111424 8

111707 69

112314 1

113121 291

113149 300

12 BR 10-02-4

14. BR 10-02-4.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Def Issued	Status
AN3C46A		Purchased	No			270	Each	104.0000	4.0000			
BOLT												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST ~~HS~~ 104
106169 5
106176 9
113164 40
113302 ✓ 50

AN960C10L

Purchased

No

270

Each

416.0000

10.0000



washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG 100
103585 100

Main Warehouse

ST 316
112116 156
112612 160

NAS1149C0332R

113288

10. BK 10-02-4.

4 BK 10-02-4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
-----------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN960C416

Purchased

No

270

Each

542.0000

12.0000



washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

542

100993 ✓

542

MS21043-3

Purchased

No

270

Each

4,542.000

8.0000



Nut

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

80

103691

80

Main Warehouse

ST

4462

111819

70

112243

29

112314 ✓

4363

12 BK 10-02-4

8 BK 10-02-4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:05:22 AM

Work Order ID: 54885

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates


Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039C4-08		Purchased	No			270	Each	93.0000	12.0000			
 SCREW												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 93

17831 ✓ 93

AN3C50A Purchased No



Bolt

270 Each 70.0000 4.0000



12/10/02-4

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 70

112046 5

112454 ✓ 15

112761 ✓ 50

Manufactured No

270 Each 58.0000 16.0000



4/10/02-4

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 58

51635 18

52597 ✓ 40

WASHER

16/10/02-4

January 5, 2010 8:05:22 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

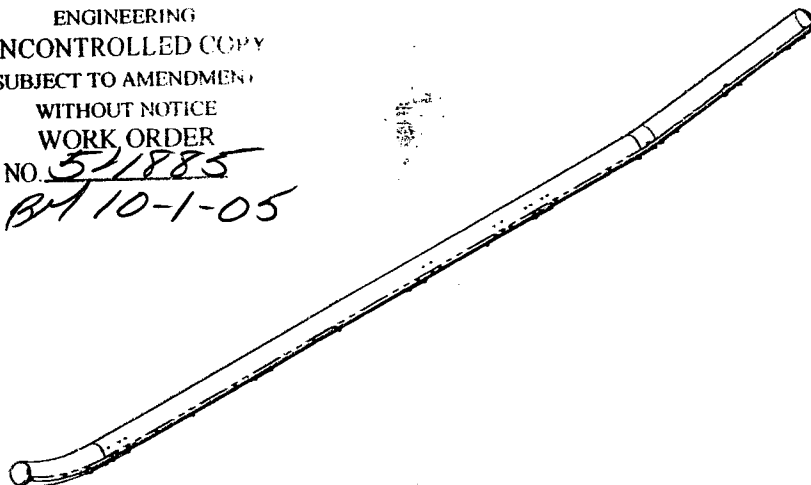
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

NO. 521885
B-10-1-05



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-3 FLOAT WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3905-041 = 40.7 lbs
D3905-043 = 47.0 lbs
D3905-045 = 47.3 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8932 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3905-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER
14	8	8	8	D3661-1	SPACER
15	8	8	1	D3846-1	GASKET
16	1	1	1	D3846-11	GASKET
17	8	8	1	D3847-1	WEARPAD
18	1	1	1	D3847-11	WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-049	AFT WEARPLATE ASSY
22			1	D3849-047	FWD WEARPLATE ASSY
23			1	D3849-045	AFT WEARPLATE ASSY
24	1	1	1	D3885-3	FLOAT WEB
25	1	1		D3905-11	FLOAT SKIDTUBE
26			1	D3905-13	FLOAT SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
29	12	12	12	D3672-3	WASHER
30	12	12	12	D3683-3	INSERT
31			16	D3411-3	WASHER
41	42	42	10	ALS-1032-130	INSERT
42	46	46	14	AN3C5A	BOLT
43			4	AN3C46A	BOLT
44			4	AN3C50A	BOLT
45	46	46	10	NAS1149C0332R	WASHER (OR AN960C10L)
46	12	12	12	NAS1149C0463R	WASHER (OR AN960C416)
47			8	MS21043-3	NUT
48	12	12	12	MS20739C4-08	SCREW

RELEASED
10/16/15

B	REVISED PART LIST. ALS-1032-130 WAS AELS-1032-130 (ZN A6-5, AS-6, CS-7, C3-7, AS-7). ADD DT8932 (ZN A6-1); D2855-3 WAS D2575 (ZN C8-2, C1-2, C8-3, C1-3, C8-4, C1-4); AN3C5A WAS AN2C4A (ZN C7-2, C1-2, C7-3, C1-3, C7-4, C1-4); D3846-047 WAS D3849-041 (ZN B3-4); ADD D3411-3 (ZN B3-4); ADD AN3C5A (ZN B3-4); Ø0.313 WAS Ø0.328 (B2-5, B2-6, C2-7, A8-7 & 07-8); REVISED NOTE 4 (ZN A6-7)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3905	SHEET 1 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 FLOAT SKIDTUBE ASSY	NTS
DATE	09.06.30	COPYRIGHT © 2000 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS IN THE PUBLIC DOMAIN. IT IS NOT TO BE USED FOR ANY PURPOSES WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O 54885

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>RF</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>RF</i>	D3905	SHEET 2 OF 8
APPROVED	<i>RF</i>	TITLE	SCALE
DE APPR.	<i>RF</i>	A119 FLOAT SKIDTUBE ASSY	NTS
DATE	09.06.30	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUBJECT TO THE FOLLOWING CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

D3846-11 GASKET

D3847-11
WEARPAD

AN3C5A BOLT
NAS1149C0332R WASHER
10 PL

AN3C5A BOLT
D3672-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

MS27039C4-08 SCREW
NAS1149C0463R WASHER
D3672-3 WASHER
12 PL

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

D2855-3 CAP
SEAL WITH
SIKAFLEX-241/291

AN3C5A BOLT
D3672-1 PHENOLIC WASHER
NAS1149C0332R WASHER
2 PL

D3849-047
FWD TRAINING WEARPLATE ASSY

AN3C50A BOLT
D3904-1 WASHER, 2 PL
D3411-3 WASHER, 4 PL
MS21043-3 NUT
4 PL

AN3C46A BOLT
D3904-1 WASHER, 2 PL
MS21043-3 NUT
4 PL

D3849-045
AFT TRAINING WEARPLATE ASSY

D3846-1
GASKET

D3847-1
WEARPAD

D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3905-13 SKIDTUBE)

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10/15/14

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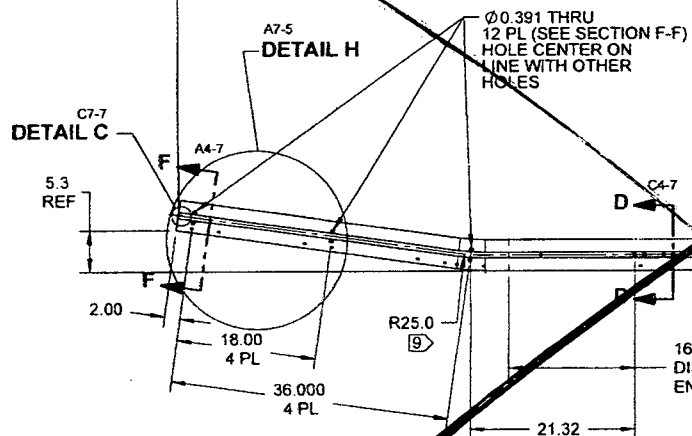
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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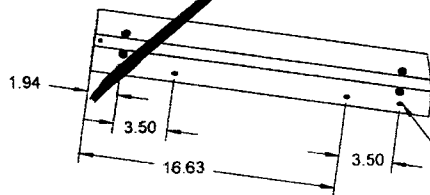
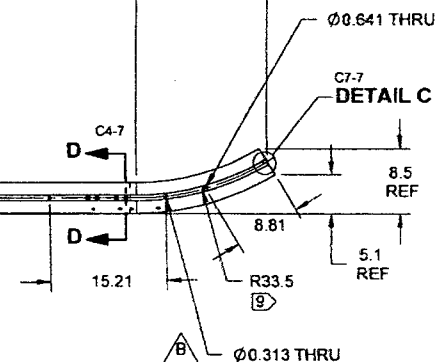
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



16.39
DISTANCE TO
END D3885-3 WEB, REF

D3905-11 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)



DETAIL H
SCALE 2X C7-5

DRILL Ø0.297
INSTALL ALS4-1032-130 INSERT
AFTER FINISH, SEE SECTION F-F
TYP. 2 PL

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09/07/15

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

A7-6
DETAIL G

C7-7
DETAIL C

5.3
REF

2.00

18.00
4 PL

36.00
4 PL

R25.0

21.32

Ø0.391 THRU
12 PL (SEE SECTION F-F)
HOLE CENTER ON
LINE WITH OTHER
HOLES

C4-7

D

16.39
DISTANCE TO
END D3885-3 WEB, REF

C2-7

E

C4-7

D

15.21

R33.5

Ø0.313 THRU

Ø0.641 THRU

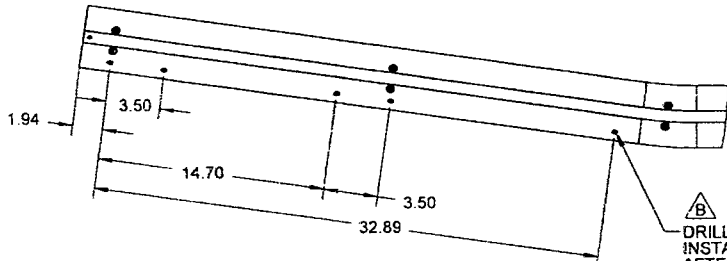
C7-7
DETAIL C

8.5
REF

8.81

5.1
REF

D3905-13 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)



DETAIL G
SCALE 2X C8-6

DRILL Ø0.297
INSTALL ALS4-1032-130 INSERT
AFTER FINISH, SEE SECTION F-F
TYP, 2 PL

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1967/15 NOV

W/O 54885

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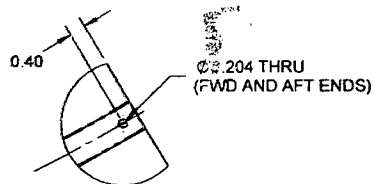
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

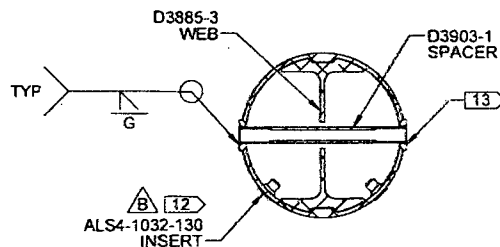
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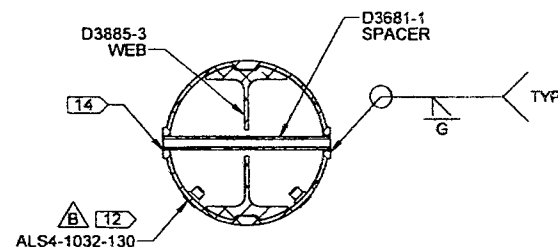
NOTE: Date & initial all entries



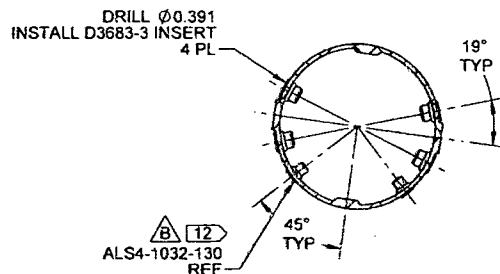
DETAIL C
SCALE 4X
C1-5
C8-5
C8-6
C1-6



SECTION D-D
SCALE 4X
(FOR 12 x $\phi 0.375$ HOLES
PER SKIDTUBE)
C5-5
C2-5
C5-6
C2-6



SECTION E-E
SCALE 4X
(FOR 8 x $\phi 0.313$ HOLES
PER SKIDTUBE)
C4-5
C4-6



SECTION F-F
SCALE 4X
C7-6
C7-5

NOTES:

- 13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR $\phi 0.375$ HOLES ONLY:
i) CHAMFER HOLES $\phi 0.475 \times 45^\circ$ (BOTH SIDES)
ii) INSERT D3903-1 SPACER
iii) WELD INTO PLACE AND GRIND FLUSH
iv) C'BORE TO 0.313×0.75 DEEP
v) DEBURR HOLES
- 14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR $\phi 0.313$ HOLES ONLY:
vi) CHAMFER HOLES $\phi 0.354 \times 45^\circ$ OR 0.050 DEEP $\times 45^\circ$ (BOTH SIDES)
vii) INSERT D3681-1 SPACER
viii) WELD INTO PLACE AND GRIND FLUSH
ix) DEBURR HOLES

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01/15/10

W/O 54885

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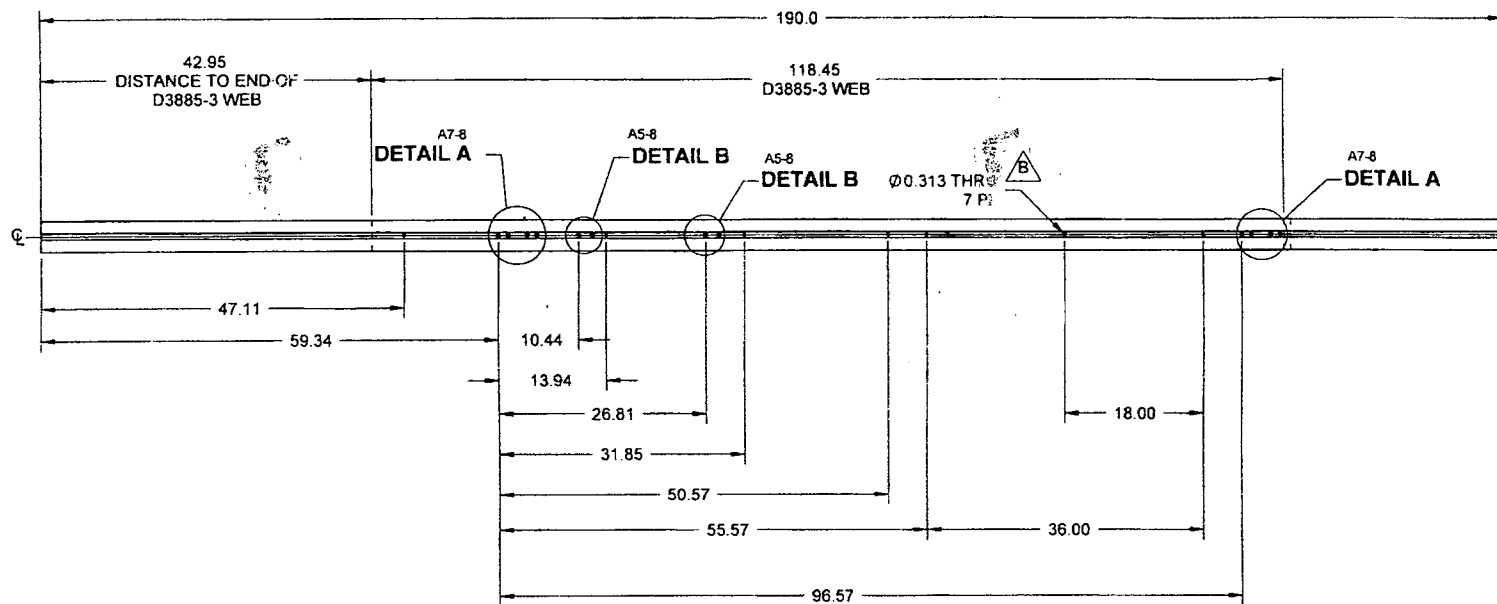
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

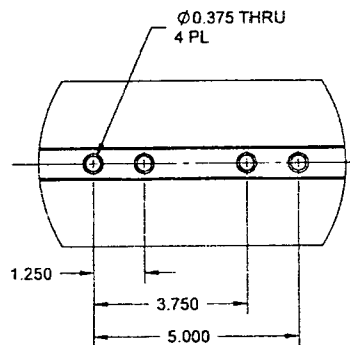
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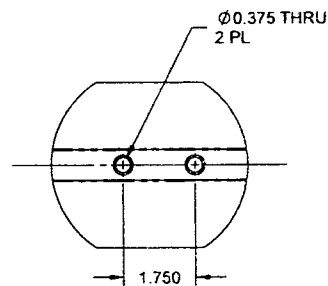
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D3905-1 TUBE
(MAKE FROM D2500-1-190 EXTRUSION)



DETAIL A D6-8
SCALE 4X D2-8



DETAIL B D5-8
SCALE 4X D4-8

RELEASED
21/07/15

2160 54885

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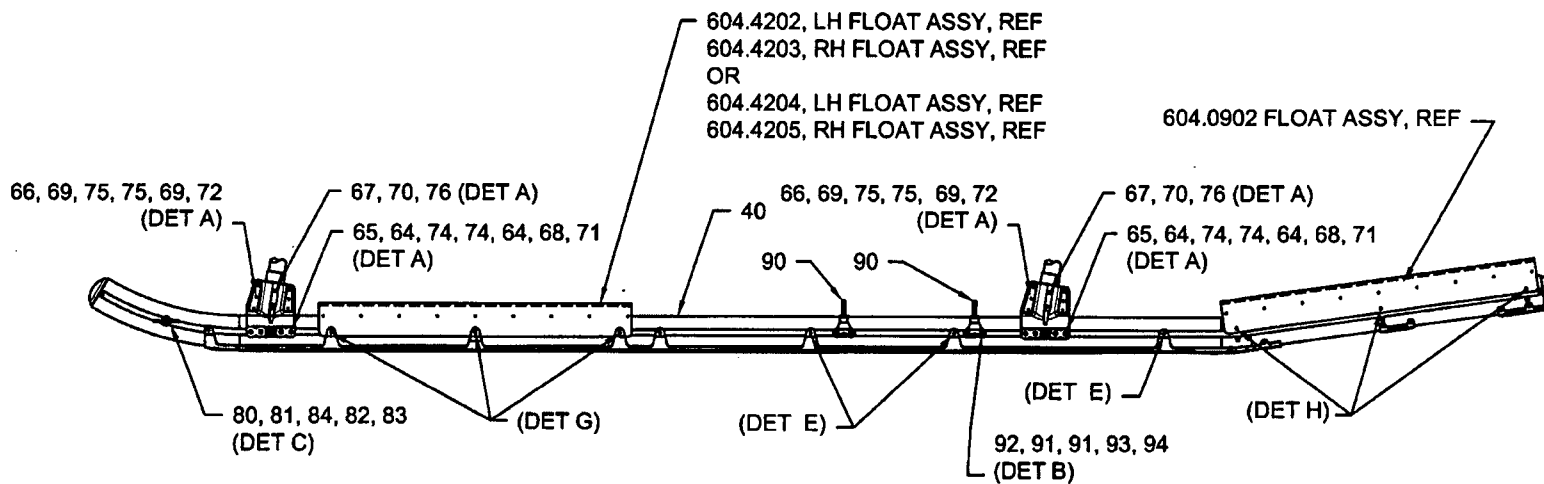


FIGURE 7 - D119-646-213 FLOAT SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, LH (SHOWN)
D119-646-214 FLOAT SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, RH (OPPOSITE)

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Revision: B

Date: 09.06.29

NO. 217

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Bardley Elliott
Job number: 52996
Part number: D119-646-243
Description: 11" skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Lat. Dymal Date of Test Coupon 09.11.16

Welder Bardley Elliott Date of Test Coupon 09.11.16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld